
SR5

Netflex

Version 2.0

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Use-Case Specification: Use Case Collection of Netflex	Date: 24/Nov/23
NF-UCSG11-V2.0	

Revision History

Date	Version	Description	Author
08/Nov/23	1.0	Created tables as templates for other members to work on the specifications of the use cases	Phạm Quốc Duy
11/Nov/23	1.1	Update and complete the specification for the use cases	Phạm Quốc Duy, Nguyễn Tấn Lộc, Tăng Tường Thoại, Trần Thành Duy, Đinh Quang Phong
24/Nov/23	2.0	Update the name, basic flow, alternative flows, post-conditions and extension points of all of the use cases	Phạm Quốc Duy, Nguyễn Tấn Lộc, Tăng Tường Thoại, Trần Thành Duy, Đinh Quang Phong

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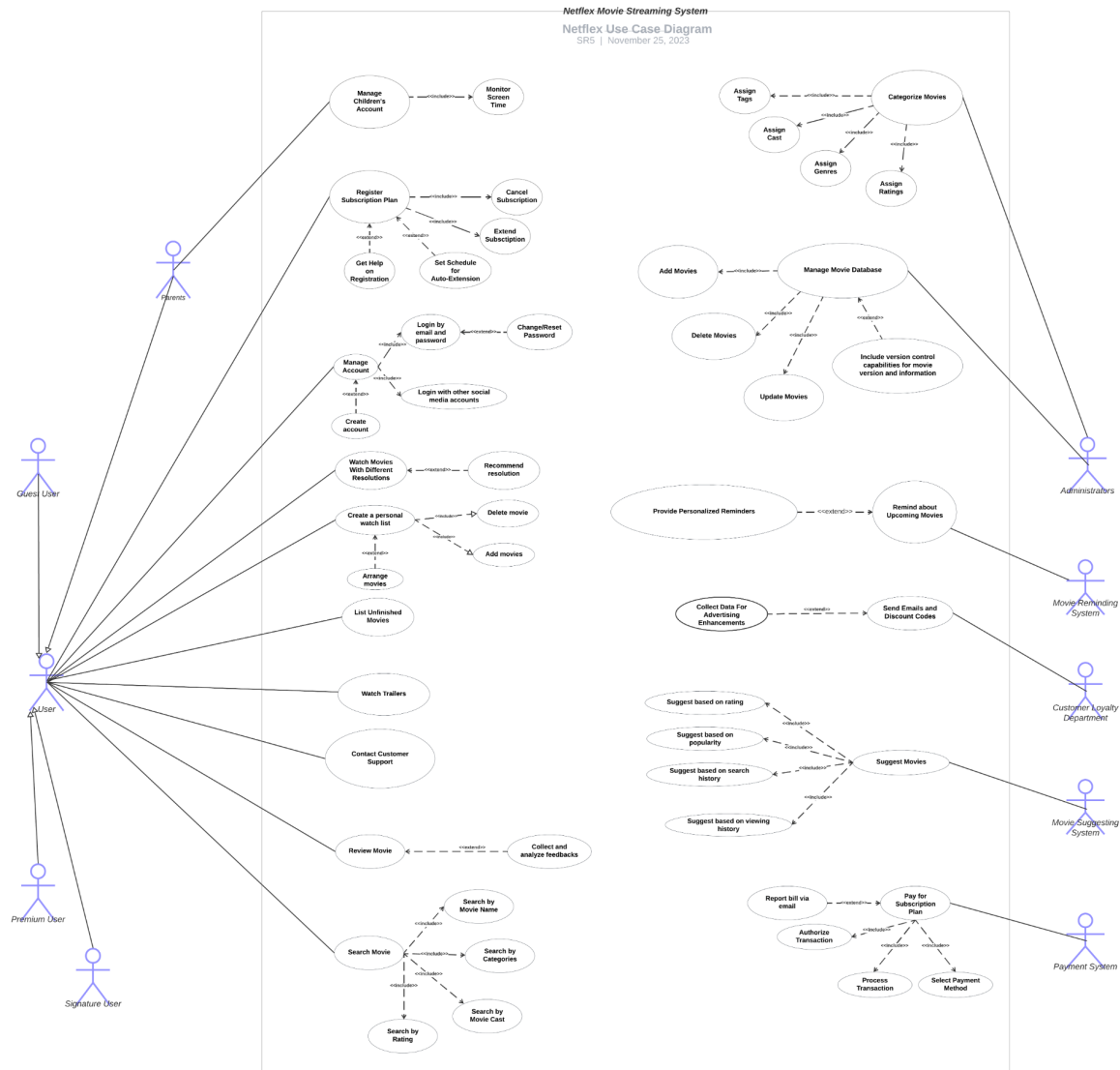
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Use Case Diagram

Link to the full design of the diagram on Lucidchart for further elaboration:

https://lucid.app/lucidchart/041f1052-260e-4d48-932c-49ef31ca2792/edit?viewport_loc=-280%2C2992%2C4276%2C2108%2C.Q4MUjXso07N&invitationId=inv_c641fd14-fdec-4512-b099-4aa288439ffe



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Use-Case Specification: Watch Movies With Different Resolutions

Use-Case ID	001
Use-Case Name	Watch Movies With Different Resolutions
Brief Description	This use case allows users to watch movies in different resolutions based on their preferences and available bandwidth.
Actors	User
Basic Flow	<ol style="list-style-type: none"> 1. The user selects a movie to watch. 2. The system presents the user with options to choose the resolution depending on the user's subscription, "Free: up to 720p", "Premium: up to 1080p" and "Signature: up to 1440p". 3. The user selects their desired resolution. 4. The system streams the movie to the user in the chosen resolution.
Alternative Flows	<p>Unsupported Resolution If the user selects a resolution that isn't supported by their device or lost internet connection at step 3, the system should:</p> <ol style="list-style-type: none"> 1. Automatically adjust the video quality to the highest supported resolution. 2. Notify the user about the change in resolution for the optimal viewing experience. <p>Technical Issue If there are technical issues affecting the movie streaming, such as server problems or content unavailability in the selected resolution at step 4, the system should:</p> <ol style="list-style-type: none"> 1. Notify the user about the technical issue. 2. Offer an alternative resolution option if available. <ol style="list-style-type: none"> 2.1. If no alternative is available, allow the user to try again later or select a different movie to watch. <p>User Cancels If the user cancels the resolution selection at step 3 and returns to the movie selection screen, the system should maintain the user's previously chosen resolution option if the user goes back to watching the same movie.</p>
Special Requirements	<p>Usability Requirements</p> <ul style="list-style-type: none"> - The resolution selection interface must be intuitive and easy to use for a wide range of users. - The user's selected resolution should be clearly displayed during playback for user awareness. <p>Performance Requirements</p> <ul style="list-style-type: none"> - The system must support adaptive streaming to adjust the video

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	<p>quality in real-time to ensure a seamless viewing experience, especially for users with varying internet bandwidth.</p> <p>Compatibility Requirements</p> <ul style="list-style-type: none"> - The video streaming system must be compatible with a variety of devices and browsers. - The system should provide options for resolutions that are supported by the user's device and network conditions. <p>Design Constraints</p> <ul style="list-style-type: none"> - The system should be designed with scalability in mind, allowing for the addition of new resolution options as technology evolves. - The user interface for resolution selection should be consistent with the overall design and branding of the website.
Pre-conditions	<p>User Authentication</p> <ul style="list-style-type: none"> - The user must be successfully logged into their registered account on the Netflix website. <p>Movie Selection</p> <ul style="list-style-type: none"> - The user must have selected a movie to watch from the available library of content. <p>Resolution Options Availability</p> <ul style="list-style-type: none"> - The system must offer multiple resolution options (e.g., 720p, 1080p, 1440p) for the selected movie. <p>Supported Resolution by Device/Connection</p> <ul style="list-style-type: none"> - The selected resolution must be supported by the user's device and internet connection. If the selected resolution is not supported, the system will default to the highest supported resolution. <p>Stable Network Connection:</p> <ul style="list-style-type: none"> - The user's device must have a stable and sufficient internet connection to support the chosen resolution for streaming the movie.
Post-conditions	<p>Video Playing Initiated</p> <ul style="list-style-type: none"> - The selected movie begins playing in the chosen resolution. <p>Continuous Monitoring</p> <ul style="list-style-type: none"> - The system continuously monitors the network conditions and, if necessary, adjusts the video quality to ensure a smooth and uninterrupted viewing experience. <p>User's Chosen Resolution Saved</p> <ul style="list-style-type: none"> - The system saves the user's chosen resolution for the current movie for the duration of the viewing session. If the user returns to the same movie, it will default to the previously selected resolution.
Extension Points	<p>Recommend Resolutions</p> <ul style="list-style-type: none"> - Provides resolution recommendations based on device and network status

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Use-Case Specification: Categorize Movies

Use-Case ID	002
Use-Case Name	Categorize Movies
Brief Description	This use case allows the administrators to categorize movies using different criterias such as: genre, casts, tags, ratings...etc.
Actors	Administrator
Basic Flow	<ol style="list-style-type: none"> 1. The admin navigates to the categorization page 2. The admin views the list of movies that require categorizing 3. System responds with a list of movies that needs categorizing 4. The admin selects a movie to categorize 5. The admin assigns tags, genres, ratings, casts information to the movie 6. The admin updates the movie's metadata with the categorization information 7. System updates the movie's metadata and saves changes in the database
Alternative Flows	<p><i>Empty list of movies that need to be categorized</i> When the list of movies that require categorizing at step 3 is empty:</p> <ol style="list-style-type: none"> 1. The system displays the message "Empty list" to the admin 2. System allows the admin to return to the homepage to conduct other tasks <p><i>Unable to find the appropriate tags/genres for movies</i> If the administrator can not find a suitable tag or genre to assign to a movie at step 5:</p> <ol style="list-style-type: none"> 1. The system displays the option for the admin to add a new genre/tag 2. The admin enters the new genre/tag and press "Save" 3. System adds the new genre/tag to the collection of genres/tags and saves changes in the database 4. System returns to the movie categorizing section 5. The admin continues to categorize the remaining movies <p><i>System fails to fetch the list of movies that require categorizing</i> In the situation of the system failing to retrieve the list of movies for categorizing at step 3:</p> <ol style="list-style-type: none"> 1. The system automatically retries to fetch the list 2. If after two retries the system still can't fetch the list, display the error message "Unable to fetch list" to admin 3. If the system successfully fetches the list, allow the admin to continue categorizing the movies
Special Requirements	<p><i>Usability Requirements:</i> The administrator's panel should provide a functional, convenient and friendly interface to optimize the admin's overall work experience</p> <p><i>Server Stability Requirements:</i> The server should be working optimally to allow the admins to categorize and update the movies' metadata accordingly without encountering any major problems. Should there be a server error, the problem should be fixed in approximately 5 minutes</p>

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Pre-conditions	<ol style="list-style-type: none"> 1. There should already be a system for movie storage and management 2. The admin should already be authorized and logged in 3. The new movies should continuously be added to the system
Post-conditions	<ol style="list-style-type: none"> 1. Categorized movies are displayed on the home page 2. Categorized movies are marked as “Categorized” in the database
Extension Points	<i>None</i>

Use-Case Specification: Search Movie

Use-Case ID	003
Use-Case Name	Search Movie
Brief Description	Allow users to seek out a list of movies based on multiple criterias such as cast, content, rating, keywords respectively.
Actors	User
Basic Flow	<ol style="list-style-type: none"> 1. The system displays a list of searching criteria. 2. The user chooses to search based on “Movie Name” 3. The user inputs the name of the movie 4. The system starts to seek movies based on movie name 5. The system responds with the movies that have the same name
Alternative Flows	<p><i>Different Searching Criteria:</i></p> <ol style="list-style-type: none"> 2.1. The user chooses to search based on Categories: <ol style="list-style-type: none"> 2.1.1. The user selects the categories 2.1.2. The system starts to seek movies based on the categories 2.1.3 The system responds with the movies that belong to those categories 2.2. The user chooses to search based on Cast: <ol style="list-style-type: none"> 2.2.1. The user enters the name of actors/actresses 2.2.2. The system starts to seek movies based on the information received 2.2.3 The system responds with the movies that have the actors/actresses 2.3. The user chooses to search based on Rating: <ol style="list-style-type: none"> 2.2.1. The user enters the expected rating 2.2.2. The system starts to seek movies based on the rating 2.2.3 The system responds with the movies that have the same rating level <p><i>No results found:</i> On empty result case encounters at step 5:</p> <ol style="list-style-type: none"> 1. The system raises an announcement on the user display screen about empty film searching. 2. The system asks the user to provide different values or choose another search option.

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Special Requirements	<p><i>Desire matching proportion:</i></p> <ol style="list-style-type: none"> 1. The results must match the user's needs by as much as 70%. <p><i>Performance of the function:</i></p> <ol style="list-style-type: none"> 2. The system must display a user-friendly searching interface. Allow users to choose a suitable search option for their own needs. 3. Final results are required to be retrieved no longer than 0.1 second.
Pre-conditions	<ol style="list-style-type: none"> 1. Users have to complete the login process first.
Post-conditions	<ol style="list-style-type: none"> 1. Sort movies in alphabetical order 2. The user should be able to add movies to their watchlist or queue.
Extension Points	<i>None</i>

Use-Case Specification: Manage Account

Use-Case ID	004
Use-Case Name	Manage Account
Brief Description	Allow users to log in to Netflix.
Actors	User
Basic Flow	<ol style="list-style-type: none"> 1. The system displays the login interface. 2. User chooses to login with email and password 3. The system displays an interface for the user to enter email and password 4. User enters login information and submits 5. The system checks the user account information and compares it with the database. 6. The system authorizes the user and directs the user to the home page
Alternative Flows	<ol style="list-style-type: none"> 2.1. User chooses to login with other social media accounts <ol style="list-style-type: none"> 2.1.1. The system displays an interface for the user to select the social media platform to login with 2.1.2. The user selects the social media platform 2.1.3. The user enters the username and password for the social media platform 2.1.4. Third-party system verifies social media account 2.1.5. The system authorizes the user and directs the user to the home page 6.1. The user can not be authorized <ol style="list-style-type: none"> 6.1.1. The system displays the error to notify the user 6.1.2. The user re-enters the credentials
Special Requirements	<ol style="list-style-type: none"> 1. The system should use strong encryption to protect the user's password. 2. The system should implement a password lockout mechanism to prevent unauthorized access. 3. The system should allow the user to set up two-factor authentication for

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	additional security.
Pre-conditions	<ol style="list-style-type: none"> 1. Users must have a valid account with the system. 2. The user must have access to the internet. 3. Users must install a web browser on their device. 4. The user's account must not be locked or disabled. 5. The user should have at least one social media account
Post-conditions	<ol style="list-style-type: none"> 1. A welcome message is displayed to the user 2. The user's session is initialized and a session token is generated. 3. The system starts tracking screen time
Extension Points	<p>Change/Reset Password: The user will receive a verification code sent via email or SMS to reset/change the password.</p> <p>Create account: The user will be redirected to the account registration interface and enter information to create an account before logging in.</p>

Use-Case Specification: Contact Customer Support

Use-Case ID	005
Use-Case Name	Contact Customer Support
Brief Description	This use case outlines the steps for providing assistance to customers who require support.
Actors	User
Basic Flow	<ol style="list-style-type: none"> 1. The user click on the button for customer support in the navigation bar 2. A form with necessary fields is displayed to the user 3. The user then fills in the form 4. The user submits the form
Alternative Flows	<p>Alternative Flow 1: Form filling is missing information.</p> <ol style="list-style-type: none"> 1. If the form is blank or the crucial information about the user's request is missing. <p>Alternative Flow 2: The networking or system, which perceives, transports the event and data, occurs errors.</p> <ol style="list-style-type: none"> 1. The process of handling the submitted user's request has errors. <p>=> The system will pop up a message to the user saying error and require the user to refill then submit it again.</p>
Special Requirements	<ol style="list-style-type: none"> 1. The user request form shall be available at any device that is able to access the website of Netflix. 2. After the user presses the submit button, the system shall process and respond to the user in under 3 seconds.
Pre-conditions	<ol style="list-style-type: none"> 1. Users must have an account when in the system and logged in.

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Post-conditions	<ol style="list-style-type: none"> 1. User's query is resolved or escalated by staff working with customer's report services. 2. Records of the interaction are appropriately persisted in the system. 3. A detailed response, which is a solution to a user support request, will be sent by email.
Extension Points	<i>None</i>

Use-Case Specification: Manage Movie Database

Use-case ID	006
Use-Case Name	Manage Movie Database
Brief Description	This use case allows authorized administrators to manage the movie database by adding, updating, deleting, and searching for movies.
Actors	Administrator
Basic Flow	<ol style="list-style-type: none"> 1. Admin selects "Manage Movies." 2. Admin chooses to add, update, or delete a movie for movies. 3. Admin perform actions which support CRUD movies. 4. System validates data and performs action to the database. 5. Admin logs out of the admin panel.
Alternative Flows	<p><i>Invalid Movie Information</i> If admin enters invalid or incomplete movie information when adding or updating a movie, the system should:</p> <ol style="list-style-type: none"> 1. Notify the admin of the specific issues with the data. 2. Prevent the addition or update of the movie until valid information is provided. 3. Allow the admin to correct the data and resubmit. <p><i>Unauthorized Access</i> If an unauthorized user attempts to access movie database management functionality, the system should:</p> <ol style="list-style-type: none"> 1. Deny access and display an error message. 2. Notify the admin or appropriate personnel about the unauthorized access attempt for further investigation. <p><i>Database Error</i> If there is an error during database operations, such as data storage, the system should:</p> <ol style="list-style-type: none"> 1. Display an error message indicating a technical issue. 2. Log the error for system administrators to investigate and resolve. <p><i>CRUD Operation Error</i> If there is any error while performing CRUD operation to the database, the database itself must rollback, maintaining the state of data consistent.</p>
Special Requirements	<i>Authorization and Access Control</i>

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	<ul style="list-style-type: none"> - Only authorized administrators should have access to the movie database management functionality. Access should be controlled through secure authentication mechanisms. <p>Security and Data Privacy</p> <ul style="list-style-type: none"> - The system must adhere to data privacy regulations and protect sensitive movie information. Any personally identifiable information should be handled in compliance with relevant laws. <p>Database Backup and Recovery</p> <ul style="list-style-type: none"> - Regular backups of the movie database should be performed to ensure data recovery in case of system failures or data loss. <p>User Activity Logging</p> <ul style="list-style-type: none"> - All activities related to movie database management should be logged for audit and security purposes. Logs should include details such as the admin's actions and changes made. <p>Performance and Scalability</p> <ul style="list-style-type: none"> - The system should be capable of efficiently managing a growing movie database without a significant degradation in performance. Database operations should be optimized. <p>Compatibility and Integration</p> <ul style="list-style-type: none"> - The system should be compatible with the underlying database management system and support integration with other tools or systems used for content management. <p>Usability</p> <ul style="list-style-type: none"> - The user interface for movie database management should be user-friendly, making it easy for administrators to add, update, delete, and search for movies. It should include features such as auto-suggestions for movie titles or actors. <p>Error Handling and Recovery</p> <ul style="list-style-type: none"> - The system should have robust error-handling mechanisms and provide meaningful error messages to assist administrators in diagnosing and resolving issues. <p>Performance Monitoring and Reporting</p> <ul style="list-style-type: none"> - Monitoring tools should be in place to track the system's performance, including response times for database operations. The system should also generate reports for performance analysis.
Pre-conditions	<p>Authentication and Authorization</p> <ul style="list-style-type: none"> - The system must ensure that the admin has successfully logged into the Netflix admin panel and has been authenticated as an authorized administrator. <p>Availability of Admin Panel</p> <ul style="list-style-type: none"> - Netflix admin panel must be accessible and operational. <p>Database Connectivity</p> <ul style="list-style-type: none"> - The system should establish a connection to the movie database. The database must be available and functional. <p>Movie Database Populated</p> <ul style="list-style-type: none"> - The movie database should already be populated with existing movies if the admin intends to perform actions like updating or deleting movies. If the database is empty, the admin may only add new movies.

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Post-conditions	A summary report is sent via email to the administrators to summarize details of the changes made to the database
Extension Points	<p><i>Include version control capabilities for movie version and information</i></p> <ul style="list-style-type: none"> - Extend the use case to include version control capabilities for movie data, enabling administrators to track and manage different versions or changes made to movie information.

Use-Case Specification: Register Subscription Plan

Use-case ID	007
Use-Case Name	Register Subscription Plan
Brief Description	This use case allows users to register a subscription plan including: Free, Premium, Signature. Additionally, they can cancel or extend their subscription in Premium and Signature.
Actors	User
Basic Flow	<ol style="list-style-type: none"> 1. User chooses to view different subscription plans 2. System displays different description plans with their description, privileges, and prices 3. User selects to purchase a desired subscription plan alongside the subscription time 4. System moves user to confirmation and transaction page 5. User enters credentials to make the payment transaction 6. Payment management system checks and validates payment details 7. System displays the notifying the successful transaction 8. System grants the privileges according to the subscription pack to the user and updates the account's details on the database 9. System returns the user to the home page
Alternative Flows	<p><i>Invalid payment credentials entered</i></p> <p>When the payment management system checks the entered credentials and finds invalid information at step 6:</p> <ol style="list-style-type: none"> 1. System displays the message to notify the user of the invalid credentials 2. System returns the user to the credentials supplying page 3. The user re-enters the credentials for the transaction 4. The system re-validates the information entered <p><i>System fails to update the privilege of the user's account</i></p> <p>If the system fails to update the privilege of the user's account due to any server errors at step 8:</p> <ol style="list-style-type: none"> 1. System displays the error message to notify the user about the incidence 2. System displays the message to assure that the perks of the user's account will be updated as soon as possible 3. System redirects the user to the home page 4. The user can watch movies with the account being at the previous state until

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	<p>the new subscription level is updated</p> <p>5. System updates the user's account to a new subscription level.</p> <p>User want to cancel subscription</p> <p>If user want to cancel subscription, the system shall::</p> <ol style="list-style-type: none"> 1. Show message to user 2. User confirm cancel subscription 3. System remove user's subscription.
Special Requirements	<p>Server Stability Requirements:</p> <p>The server should be working optimally so that the registration process occurs without major errors. Should there be a server error, the problem should be fixed in approximately 5 minutes</p> <p>Payment Management System's Stability</p> <p>The payment system should operate smoothly so that transactions made related to subscription registration may occur efficiently with a success rate of more than 98%, avoid making the user re-enter their credentials</p> <p>Payment Credentials Privacy</p> <p>The information relating to the users' payment credentials and transaction details must be kept safe, private and secured assuring that there will be no sensitive information leakage.</p> <p>Handling Different Billing Cycles</p> <p>The subscription registration system should be able to store and handle different billing cycles issued by the users</p>
Pre-conditions	<ol style="list-style-type: none"> 1. The users should already be registered and logged into Netflix 2. The subscription packs should already be defined and priced 3. The payment methods and tax rate should already be calculated 4. There should already be a payment managing and validating system 5. The users should already have at least 1 supported form of online payment method available
Post-conditions	<ol style="list-style-type: none"> 1. The user has been registered for the selected subscription pack for the desired period 2. The user has full access to the functionalities, privileges of the subscription pack 3. The user has been billed and a confirmation email is sent to the user by the system 4. Information of the registration has been recorded into the database
Extension Points	<p>Get Help On Registration</p> <p>This takes place during registration and allows the user to access FAQs (Frequently Asked Questions) or reach out to customer support for help relating to the whole registration process or any specific step in that whole process.</p> <p>Set Schedule For Auto-Extension</p> <p>This takes place after the user has successfully subscribed to a certain tier and allows the user to extends their subscription automatically after a certain period of time after it has expired, saving time for re-registration</p>

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Use-Case Specification: Pay for Subscription Plan

Use-case ID	008
Use-Case Name	Pay for Subscription Plan
Brief Description	The application shall provide and support multiple formats of online banking payment for higher qualified accounts.
Actors	Payment System
Basic Flow	<ol style="list-style-type: none"> 1. The user selects the "Purchase" option. 2. The system displays the pricing information for the high-grade account. 3. The user selects the desired payment method (e.g., credit card, PayPal, etc.). 4. The user enters their payment information. 5. The system validates the information 6. The system checks whether the account's balance is enough to pay the price. 7. The system processes the transaction. 8. The system confirms transactions and reports the bill to the client. 9. The system updates the user account class in the database.
Alternative Flows	<p>Online banking application payment:</p> <ol style="list-style-type: none"> 1. Users choose some online banking apps like Paypal, Google Pay, ... 2. Payment account information is prompted 3. User inputs the information 4. System verifies the information 5. System processes the transaction and report bill via email <p>Credit card payment:</p> <ol style="list-style-type: none"> 1. Users are prompted to input the local credit card 2. Users enter credit card information like credit card number, cvv and thru date 3. The system validates the inputs 4. System performs transaction 5. System commit transaction and report bill via email <p>Inappropriate payment information given: Occur on user inputting the invalid information such as invalid credit card, invalid bank account, ..</p> <ol style="list-style-type: none"> 1. The system raises an announcement about retrieving the incorrect payment content on the user display console . 2. The user is prompted to correct the payment information <p>Loss of misallocation of funds during transfer process: When system recognizes drop of money allocation during the transaction:</p> <ol style="list-style-type: none"> 1. The system rolls back the state of user information in the system database. 2. An error announcement is displayed on the user's console screen. 3. Users are asked to redo the purchase operation.
Special Requirements	<ol style="list-style-type: none"> 1. The whole transaction procedure should be committed within 0.1 second and a bill must be written to return to the user no longer than 1 second.

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	2. On validation failure encounters, the system must cancel the user tier upgrading as well as the transfer process and their balance is required to be recovered to the previous state.
Pre-conditions	<ol style="list-style-type: none"> 1. The user must have a registered account 2. The user must have selected the desired subscription plan.
Post-conditions	<ol style="list-style-type: none"> 1. The user's account is upgraded to the high-grade account. 2. The user's payment information is securely stored. 3. The user receives a confirmation bill via email about the transaction.
Extension Points	<p><i>Report bill via email:</i></p> <ol style="list-style-type: none"> 1. The system will send an email to the user, notifying the completed transaction with details including: purchased item type, price, transaction status,...

Use-Case Specification: Suggest Movies

Use-case ID	009
Use-Case Name	Suggest Movies
Brief Description	This use case describes the process by which the system suggests movies to users based on their viewing history, ratings, and other factors.
Actors	Movie Suggesting System
Basic Flow	<ol style="list-style-type: none"> 1. The system loads suggestion data based on the user's personal data, rating and popularity 2. Lists a selection of movies suitable for the user. 3. The system runs previews on the homepage and allows the user to view movie details or watch the movie by clicking on it.
Alternative Flows	<p>New users with no existing data:</p> <ol style="list-style-type: none"> 1. If the user does not have a viewing/searching history in the system, the system will suggest popular movies. 2. If the user has not rated any movies on the system, the system will suggest a variety of movies from different genres. 3. If the system is unable to generate any suggestions, it will display a message to the user.
Special Requirements	<ol style="list-style-type: none"> 1. The system should use a machine learning algorithm to generate personalized movie suggestions for each user. 2. The system should keep track of user feedback on suggestions to improve the accuracy of its recommendations over time. 3. The system should allow users to customize their suggestion preferences, such as the number of suggestions to display and the genres to include.
Pre-conditions	<ol style="list-style-type: none"> 1. The user must have a valid account with the system. 2. The user should be using Netflix for a certain period of time.

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Post-conditions	<ol style="list-style-type: none"> 1. Users can provide feedback on the system's suggestions. 2. The user is able to view more information about each suggested movie, such as the title, genre, release date, and cast.
Extension Points	<i>None</i>

Use-Case Specification: Watch Trailers

Use-case ID	010
Use-Case Name	Watch Trailers
Brief Description	A trailer of the films will be shown to the user when they are needed.
Actors	User
Basic Flow	<ol style="list-style-type: none"> 1. On the Netflix client website, users click on the selected films they consider to watch. 2. The system will redirect users to the detailed page for the selected movie. 3. The user will click the trailer button for watching the selected movie trailer. 4. The user will be redirected to a new page for watching the trailer. 5. The trailer will be displayed to the user.
Alternative Flows	<p><i>Alternative Flow 1:</i> At step 2, if an error happens, the user will get notification and return to the main page.</p> <p><i>Alternative Flow 2:</i> At step 4, if an error happened. the user will get notification and return to the movie details page.</p>
Special Requirements	<ul style="list-style-type: none"> - User's wait time shall be under 2 seconds - User's must have error notification friendly - If an error occur, user will be backed to the last page which is not error - Trailer shall be displayed with reasonable resolution. - Ensure the trailer playback is compatible across various devices (phones, tablets, smart TVs) and operating systems commonly used by the app's target audience. - The app must ensure that trailers are available for a significant portion of the movie catalog. Regular checks and updates should be made to ensure trailers are accessible and up-to-date.
Pre-conditions	<ol style="list-style-type: none"> 1. The user must have an account at Netflix 2. Users must log in the system for further uses. 3. The movie must have an movie trailer 4. The movie trailer is displayed on the user's screen. 5. Playback controls are available and functional for the user. 6. User's ability to access the trailer remains consistent and uninterrupted.
Post-conditions	After the trailer is finished, the system will remain the current page.
Extension Points	<i>None</i>

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Use-Case Specification: Create A Personal Watchlist

Use-case ID	011
Use-Case Name	Create A Personal Watchlist
Brief Description	The system allows users to create a personalized movie list.
Actors	User
Basic Flow	<ol style="list-style-type: none"> 1. The user navigates to the "Watchlist" page. 2. The user clicks on the "Create New Watchlist" button. 3. The user enters a name for their watchlist and clicks on the "Create" button. 4. The system creates the new watchlist and displays it to the user. 5. Users can click on a movie and choose the 'Add to list' function to add the movie to their created list. 6. The system will record and update that movie in the list.
Alternative Flows	<ol style="list-style-type: none"> 1. If the user tries to create a watchlist with the same name as an existing watchlist, the system will display an error message. 2. Users can delete one or multiple movies from their list. 3. If there are any errors relating to the process of fetching, updating the Watchlist data in the database, the system will display an error message
Special Requirements	<ol style="list-style-type: none"> 1. The system should allow users to create multiple watchlists. 2. The system should allow users to share their watchlists with other users. 3. The system should allow users to filter and sort their watchlist items.
Pre-conditions	<ol style="list-style-type: none"> 1. The user must have a valid account with the system. 2. The user must have access to the internet. 3. The user must have a web browser installed on their device. 4. There should already be a way to manage the user's watchlists
Post-conditions	<i>None</i>
Extension Points	<p>Arrange Movies:</p> <ol style="list-style-type: none"> 1. Users can sort movies by genre, rating, etc. by selecting the 'Sort Movies' function

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Use-Case Specification: List Unfinished Movies

Use-case ID	012
Use-Case Name	List Unfinished Movies
Brief Description	This use case enhances the user experience by allowing them to easily resume watching incomplete movies.
Actors	User
Basic Flow	<ol style="list-style-type: none"> 1. User navigates to the "Unfinished Movies" section. 2. System displays a list of movies the user has started but not finished. 3. User selects a movie to resume watching. 4. System resumes playback from where the user left off. 5. User completes the movie. 6. System marks the movie as finished and removes it from the "Unfinished Movies" list.
Alternative Flows	<p>No Unfinished Movies</p> <ul style="list-style-type: none"> - If user has no unfinished movies in their list, the system should: <ol style="list-style-type: none"> 1. Display a message indicating that the user's list of unfinished movies is empty. 2. Offer the user options to browse and select other movies. <p>Technical Issue</p> <ul style="list-style-type: none"> - If there is a technical issue preventing the system from resuming playback or marking a movie as finished, the system should display an error message indicating a technical problem.
Special Requirements	<p>User Privacy and Data Security</p> <ul style="list-style-type: none"> - The system should prioritize user data privacy and comply with data protection regulations. It should securely store and manage user viewing history and progress data. <p>Performance and Scalability</p> <ul style="list-style-type: none"> - The system should provide fast and responsive loading of the unfinished movies list, even for users with a large number of incomplete movies. It should be scalable to handle increased user activity. <p>Usability</p> <ul style="list-style-type: none"> - The user interface for accessing the unfinished movies list should be intuitive and user-friendly, enhancing the user experience. <p>Error Handling and Feedback</p> <ul style="list-style-type: none"> - The system should have robust error-handling mechanisms, providing clear and user-friendly error messages to help users diagnose and resolve issues. <p>Opt-Out Mechanism</p> <ul style="list-style-type: none"> - Users should have the option to opt out of having their viewing history tracked and, subsequently, removed from the unfinished movies list.

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Pre-conditions	<p><i>User Authentication</i></p> <ul style="list-style-type: none"> - The user must successfully log into their Netflix account, providing valid credentials. <p><i>User Account Status</i></p> <ul style="list-style-type: none"> - The user's Netflix account must be in good standing and not suspended or banned. <p><i>Availability of Unfinished Movies List</i></p> <ul style="list-style-type: none"> - The system should have recorded and maintained the user's viewing history, including information about which movies they have started but not finished. <p><i>Privacy Settings</i></p> <ul style="list-style-type: none"> - The user's privacy settings or preferences should allow the system to track their viewing history. If the user has opted out of tracking, this feature should be disabled.
Post-conditions	<p><i>Viewing Unfinished Movies List</i></p> <ul style="list-style-type: none"> - System displays the list and retains all user data and preferences. <p><i>Resuming Playback</i></p> <ul style="list-style-type: none"> - Users can resume watching, the system continues playing video from where the user left off.
Extension Points	<i>None</i>

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Use-Case Specification: Manage Children's Account

Use-case ID	013
Use-Case Name	Manage Children's Account
Brief Description	This allows users who are parents to control and monitor the overall usage level of their children, including: monitor average screen time, limit explicit content and enable academic-oriented content suggestions
Actors	User: Parent
Basic Flow	<ol style="list-style-type: none"> 1. User navigates to the "Parent Mode" section in "Account Management" 2. System directs user to the Parent Mode panel 3. System displays the Parent Mode panel to the parent 4. User chooses to view the screen time with Monitor Screen Time 5. The system displays the average screen time per day of the account to the user
Alternative Flows	<p>4.1 Disable Parent Mode:</p> <ol style="list-style-type: none"> 1. Password is prompted 2. User enters password 3. System turn off parent mode <p>System fails to update the state of account If the system can't update the state of the account in the database due to some technical issues:</p> <ol style="list-style-type: none"> 1. System displays the error to notify the user that the Parent Mode can't be enabled/disabled for some issues 2. System returns user to the panel with the old settings <p>Invalid password entered If the user enters the wrong password while trying to disable Parent Mode:</p> <ol style="list-style-type: none"> 1. System displays the message to notify that the password entered was wrong and Parent Mode not successfully disabled 2. System takes the user back to the Parent Mode panel with the old settings
Special Requirements	<p>User Experience The parental-administration interface should be intuitive and friendly for parents of different age groups to use</p> <p>Server Stability Changes made to the state of the Parent Mode should be updated fast and with an approximate delay of 1 second. Additionally, the server is expected to function stably during the update process.</p> <p>Security Requirements The step of disabling Parent Mode should be thoroughly validated by verifying the account's password in order to avoid children disabling the Parent Mode themselves</p>
Pre-conditions	<ol style="list-style-type: none"> 1. The parent (user) should already have an account registered in Netflix

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	<ol style="list-style-type: none"> There should already be at least 2 user profiles: one for the parent, one for their children Academic-oriented content should already be available in the system The parent's consent should already be collected before allowing any modifications with the parental-administration system
Post-conditions	<ol style="list-style-type: none"> If the parent mode is disabled, an email will be sent to notify the user If the average screen time exceeds a certain limit, an email will be sent to notify the user
Extension Points	<i>None</i>

Use-Case Specification: Review Movie

Use-case ID	014
Use-Case Name	Review Movie
Brief Description	Users can make reviews about their experience with the application as well as the movies that they watched by commenting or giving ratings.
Actors	User
Basic Flow	<ol style="list-style-type: none"> The user selects the review option while on the movie page. The user enters their review content, including any comments and ratings they wish to provide. The user submits the review.
Alternative Flows	<p><i>User review submission failed:</i> Occur when user connection failed:</p> <ol style="list-style-type: none"> The system cancels the user submission. An announcement is raised on the user's screen to explain that the submission has failed The user is prompted to check the Internet connection and rewrite the retry submission.
Special Requirements	<ol style="list-style-type: none"> The system must complete the review storing procedure under 0.1 second. On listing previous comments from other users on the same movie, the list should be sorted out from latest to oldest ones.
Pre-conditions	<ol style="list-style-type: none"> The user must have a registered account.
Post-conditions	<ol style="list-style-type: none"> The user's review is submitted and stored in the system database. The system displays a list of previous reviews and ratings from other users and the current one as well in descending order of timestamp.
Extension Points	<p><i>Collect and analyze feedbacks:</i></p> <ol style="list-style-type: none"> The system collects and analyzes viewer feedback through reviews, aggregates these reviews to sort and rate movies on the Netflix ranking board.

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Use-Case Specification: Send Emails and Discount Codes

Use-case ID	015
Use-Case Name	Send Emails and Discount Codes
Brief Description	How customers can earn and redeem rewards through a customer loyalty program, and how the system can use this information to send them personalized ads and discount codes.
Actors	Customer Loyalty Department
Basic Flow	<ol style="list-style-type: none"> 1. Users purchase movies or renew subscriptions on Netflix. 2. The system persists user transaction information. 3. The system uses customer purchase history and preferences to generate personalized advertisements and discount codes. 4. The system sends personalized advertisements and discount codes to customers via email. 5. Customers can redeem their rewards on the Netflix system or use them to get discounts when purchasing movies or subscribing to services.
Alternative Flows	<ol style="list-style-type: none"> 1. If the customer attempts to redeem rewards for an item that is not eligible, the redemption will be rejected. 2. If the customer does not want to receive personalized ads and discount codes from the system, they can opt out of these communications by updating their account settings
Special Requirements	<ol style="list-style-type: none"> 1. The system should track the customer's purchase history and preferences in order to generate personalized ads and discount codes. 2. The system should allow customers to opt out of receiving personalized ads and discount codes. 3. The system should comply with all applicable privacy laws and regulations.
Pre-conditions	<ol style="list-style-type: none"> 1. The customer must have a valid account with the system. 2. The customer must have provided their email address to the system.
Post-conditions	<ol style="list-style-type: none"> 1. The customer has earned rewards for their purchases. 2. The customer has redeemed rewards for discounts, products, or services. 3. The customer has received personalized ads and discount codes from the system via email.
Extension Points	<p>Collect Data For Advertising Enhancements</p> <p>This allows the statistics on: the amount of promos used, the number of users registered for the loyalty program...etc to be collected to optimize the advertisements and the loyalty program itself</p>

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Use-Case Specification: Remind about Upcoming Movies

Use-case ID	016
Use-Case Name	Remind about Upcoming Movies
Brief Description	This use-case is a system that continuously reminds users to use the app for watching movies from promotion, advertising, events,...
Actors	Movie Reminding System
Basic Flow	<ol style="list-style-type: none"> 1. Information about upcoming movies is added to the reminder system either automatically or manually. 2. The system analyzes and sorts these movies by their release dates. 3. The top 5 closest movies are displayed on the left sidebar of the website. 4. A notification about the top 3 movies is sent via email or app notification according to the daily schedule.
Alternative Flows	<p>Failed Delivery:</p> <ul style="list-style-type: none"> - In case of delivery failure at step 4 (e.g., invalid contact information), the system logs the failure and may attempt redelivery or flag the issue for manual review.
Special Requirements	<ol style="list-style-type: none"> 1. The notification shall be easy to read, hitting the user. 2. The notification shall be sent on time, which is scheduled, with the delay under 10 minutes. 3. Evaluate the frequency and timing of notifications to maintain user engagement without causing annoyance. 4. Regularly review the effectiveness of reminders and promotions through user engagement metrics.
Pre-conditions	<p>The users must have their own account on the Netflix system</p> <p>The users must subscribe to the reminder system</p>
Post-conditions	User interactions (acknowledgment, dismissal, action) with the notifications are appropriately logged
Extension Points	<p>Provide Personalized Reminders:</p> <ul style="list-style-type: none"> - Scheduled analysis of user behavior and preferences. - This extension leverages data analysis and predictive modeling to deliver more personalized reminders, enhancing user engagement and potentially increasing the relevance of the notifications for individual users. Adjust the steps and methodologies to fit the available data and predictive capabilities of your system.